

PATENT COOPERATION TREATY
PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
 (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FNTYA077WO	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2005/001161	International filing date (<i>day/month/year</i>) 21.01.2005	Priority date (<i>day/month/year</i>) 23.01.2004
International Patent Classification (IPC) or national classification and IPC F02D41/04, F02D29/02, F02D41/06, F02D45/00, F02N11/04, F02N15/00		
Applicant TOYOTA JIDOSHA KABUSHIKI KAISHA		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising: <ul style="list-style-type: none"> a. <input type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of _____ sheets, as follows: <ul style="list-style-type: none"> <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/001161

Box No. I	Basis of the report
<p>1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p><input type="checkbox"/> This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:</p> <ul style="list-style-type: none"> <input type="checkbox"/> international search (Rule 12.3 and 23.1(b)) <input type="checkbox"/> publication of the international application (Rule 12.4) <input type="checkbox"/> international preliminary examination (Rule 55.2 and/or 55.3) <p>2. With regard to the elements of the international application, this report is based on (<i>replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report</i>):</p> <p><input checked="" type="checkbox"/> the international application as originally filed/furnished <input type="checkbox"/> the description: pages _____ as originally filed/furnished pages* _____ received by this Authority on _____ pages* _____ received by this Authority on _____ <input type="checkbox"/> the claims: nos. _____ as originally filed/furnished nos.* _____ as amended (together with any statement) under Article 19 nos.* _____ received by this Authority on _____ nos.* _____ received by this Authority on _____ <input type="checkbox"/> the drawings: sheets _____ as originally filed/furnished sheets* _____ received by this Authority on _____ sheets* _____ received by this Authority on _____ <input type="checkbox"/> a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.</p> <p>3. <input type="checkbox"/> The amendments have resulted in the cancellation of:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the description, pages _____ <input type="checkbox"/> the claims, nos. _____ <input type="checkbox"/> the drawings, sheets/figs _____ <input type="checkbox"/> the sequence listing (<i>specify</i>): _____ <input type="checkbox"/> any table(s) related to sequence listing (<i>specify</i>): _____ <p>4. <input type="checkbox"/> This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).</p> <ul style="list-style-type: none"> <input type="checkbox"/> the description, pages _____ <input type="checkbox"/> the claims, nos. _____ <input type="checkbox"/> the drawings, sheets/figs _____ <input type="checkbox"/> the sequence listing (<i>specify</i>): _____ <input type="checkbox"/> any table(s) related to sequence listing (<i>specify</i>): _____ 	

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/001161

Box No. V	<u>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</u>	
1. Statement		
Novelty (N)	Claims	<u>1-17</u> YES
	Claims	_____ NO
Inventive step (IS)	Claims	_____ YES
	Claims	<u>1-17</u> NO
Industrial applicability (IA)	Claims	<u>1-17</u> YES
	Claims	_____ NO
2. Citations and explanations (Rule 70.7)		
<p>Document 1: JP 2001-317389 A (Toyota Motor Corp.), 16 November 2001, claims & US 2001/0042535 A1 & EP 001154154 A2</p> <p>Document 2: JP 2001-214828 A (Toyota Motor Corp.), 10 August 2001, claims and paragraph [0003]</p> <p>Document 3: JP 11-315730 A (Toyota Motor Corp.), 16 November 1999, paragraphs [0016] and [0139]. & EP 000886058 A2</p> <p>Document 4: JP 2002-295347 A (Nissan Motor Co., Ltd.), 09 October 2002, claims</p>		
<p>The inventions set forth in claims 1, 2, 6, 7, 15 and 16 do not involve an inventive step in the light of document 1 and document 2 cited in the international search report. It would have been easy for a person skilled in the art to apply the feature disclosed in document 2, whereby the fuel pressure on the fuel injection valve side is reduced when the engine is not being operated, in the invention disclosed in document 1. Furthermore, the question of whether to configure the invention for reducing the fuel pressure on the fuel injection valve side so that the fuel pressure is reduced in the period preceding the stopping of the engine or so</p>		

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/001161

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

that the fuel pressure is reduced in the period following the stopping of the engine is merely a simple design matter that can be configured with consideration of the leakage of fuel subsequent to the stopping of the engine.

The inventions set forth in claims 3 to 5 do not involve an inventive step in the light of documents 1 and 2, and document 3 cited in the international search report. It would have been easy for a person skilled in the art to apply the features disclosed in document 3, i.e. the feature wherein the fuel pressure is reduced by injecting fuel into the engine and the feature wherein engine stop control is implemented upon detecting that the fuel pressure has fallen to a prescribed value, in the invention disclosed in document 1.

The inventions set forth in claims 8 to 14 and 17 do not involve an inventive step in the light of documents 1 to 3 and document 4 cited in the international search report. It would have been easy for a person skilled in the art to apply the technical features disclosed in documents 1 to 3 in the hybrid vehicle disclosed in document 4.